BENELEC

PROFESSIONAL WIRELESS PRODUCTS

IS EEX Submersible Conventional Portables

BLS-IS Series - Advanced Signalling

Main Features

- 255 Channels Capacity
- Frequency Range: refer to Product Table below
- Submersible to IP68 (5 metres for 1 hour)
- Rugged - MIL STD 810 C/D/E/F
- 1800mAh Li-Ion battery
- Robust multi-pin accessory socket
- Flash upgradeable to add features
- 2/5 Tone Encode / Decode
- Scrolling graphic LCD display
- Channel naming
- Full 20-key keypad
- Voice annunciation (option)
- Bluetooth™ wireless communications (option)

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For - Convenience

- VOX hands free (with audio accessory)
- Programmable channel monitor button
- 2/5 tone selective calling & FFSK
- Open or Closed channel modes
- Call a group, individual or all radios at once
- Multiple ring tones
- Battery charge count
- Invert display
- Intuitive menus (like a mobile phone)
- Info button (user guide built in to radio)
- Speed dial
- Who's calling (caller ID)
- 255 user contact list (just like a mobile phone)
- Missed, received and dialled numbers lists
- Selectable "profiles" General, Silent & DND (with auto respond)
- Talk around
- DTMF dial mode - stored / keypad

For - Security

- Stun & alarm a lost or stolen radio (& revive if found)
- Programmable scrambler (voice inversion)
- Power on password option

For - Safety

- Local Personal Attack Alarm
- Panic button with remote alert
- Emergency microphone live
- Automatic Lone Worker alarm mode
- Automatic Man Down alarm mode (option)
- Shunting mode (for rail companies)
- Continue alarm even if switched off
- Silent alarm call mode
- Manual location information with emergency
- Fully automatic indoor location information (option)
- GPS location information with emergency (option)
- GPS "navigate to" casualty (option)

For - Text Messaging & Emails

- Send/display status messages
- Send / display predefined text messages
- Display free format text/email text messages

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For systems communications requirements, the advanced signalling 255 channels BLS-IS Series is an elite product, providing feature rich and flexible communications. Features include FFSK signalling, as well as variable point voice scrambler, channel scanning, shunting mode, personal attack alarm, whisper mode and lone worker. Furthermore, man down, Bluetooth and GPS automatic location information options are also available.

Utilising the latest intelligent Lithium-Ion battery technology, your BLS Series, if dealer enabled, will display a battery cycle count each and every time you power-on your radio. For your convenience it will even alert you to imminent battery life expiration. This MIL-STD 810C/D/E/F construction, IP68 approved portable has a high visibility back-lit display with scrolling text, allowing for text messaging and the use of its easy to use intuitive menus.

Benelec Part #	Model and Spec	Description & Spec	Frequency (MHz)	Thumbnail
01131926	BLS-IS926	VHF High - 255 Channels	136 -174	
01151986U	BLS-IS986-U	UHF U - 255 Channels	450 - 520	

Technical Specifications	
General	
Frequency Range	BLS-IS926: VHF 136 - 174MHz / BLS-IS986-U: UHF 450 - 520MHz
Channels	255 Channels
Channel Spacing	12.5 kHz / 25 kHz
Communication Method	Simplex / semi duplex
Antenna Impedance	50 Ω
Antenna	Whip / stubby
Battery Type	1800 mAh Li-Ion battery pack
Power Supply Voltage	7.4V DC
Microphone	Internal condenser microphone
Operating Temperature	- 20º to + 55ºC
Size (mm)	59.5 (W) x 130 (H) x 37 (D)
Weight	277g with battery and aerial
Transmitter	
Power Output	High: 5W, Low: 1W
Modulation	8K0F3E / 16K0F3E
Oscillator Method	PLL
Frequency Stability	< ±0.00025% (±2PPM)
Maximum Deviation	±2.5kHz(Narrow) / ±5kHz (Wide)
Audio Distortion	< 5% (1 kHz 60%)
Spurious Emission	-68dBc
Hum & Noise	- 40dB
Receiver	
Receiver Type	Double Super Heterodyne type
Sensitivity	-0.25uV (12dB SINAD)
Frequency Stability	±0.00025% (±2PPM)
Spurious Rejection	-60 dB
Adjacent Channel Selectivity	-60 dB (Narrow), -70 dB (Wide)
Distortion	< 3% Typical
Hum & Noise	-40 dB
Audio Output	1W
Speaker Size	38 mm

Supplied Accessories

- CNB750E - 7.4v, 1800mAh rechargeable Lithium-Ion battery pack
- CBH750 - Spring loaded belt clip
- High efficiency antenna (can be exchanged for stubby antenna at point of order)
- User manual

Optional Accessories

Batteries & Chargers

Model No & Descriptions	Thumbnail
CNB750 – Lithium-ion battery pack for the BLS series hand portable radio. The CNB750 is an 1800mAh lithium-ion lightweight battery pack for the BLS series of hand portable radios. The lithium-ion technology gives the radio a long operating time and the batteries will not suffer from the 'memory effect' that can be experienced on radios using alternative battery chemistries.	
CSAHT – Single-unit rapid charger for the BLS series hand portable This intelligent rapid mains charger ensures that the battery only receives the correct amount of charge. Charge status is indicated via a multi-coloured LED so you will know whether the battery is fully charged before use. Charger operates between 110-230V. Due to the high capacity of the BLS Li-Ion battery pack, charge time is around 2.5 hours. The charger can be either desk or wall mounted.	
CSBHT - Six-unit multi rapid charger for the BLS series hand portable radio This six-unit intelligent rapid mains charger ensures that the batteries only receive the correct amount of charge. Charge status is indicated on each pod via a multi-coloured LED so you will know whether the battery is fully charged before use. Charger operates between 110-230V. Due to the high capacity of the BLS Li-Ion battery pack, charge time is around 2.5 hours.	
CCA230 - Single-unit regular charger for the BLS series hand portable radio Single-unit 230V mains regular charger for the BLS series hand portable radio. Due to the high capacity of the BLS Li-Ion battery pack, charge time is around 3.5 hours. The charger can be either desk or wall mounted.	
CCA110 - Single-unit regular charger for the BLS series hand portable radio Single unit 110V mains regular charger for the BLS series hand portable radio. Due to the high capacity of the BLS Li-Ion battery pack, charge time is around 3.5 hours. The charger can be either desk or wall mounted.	
CCA12 - 12V DC regular charger for the BLS series hand portable A charger pod and cigar lighter lead for regular charging of the BLS series batteries from a 12V DC source. Due to the high capacity of the BLS Li-Ion battery pack, charge time is around 3.5 hours. The charger can be either desk or wall mounted.	
CMC750 - Cigar lighter lead for the BLS series hand portable A spare cigar lighter lead for the CCA trickle charger pod..	
CWC640 – Mains adapter for the BLS series CCA regular charger pod A spare mains adapter available in either 230V Euro 2 pin or UK 3 pin and 110V 2 pin options. Specify when ordering.	

CBEHT - Dummy battery with regulator for 12v operation Enables the radio to be powered from a vehicle/motorcycle battery etc	
Audio Accessories	
CMP1/750 - Pocket size lapel speaker microphone for the BLS series hand portable radio The CMP1/750 is attached with a revolving clip and allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. The CMP1/750 has a socket (3.5mm mono) to allow an optional earpiece (EHP9) for discreet reception of calls. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.	
CMP750 - A submersible, very rugged, heavy duty lapel speaker microphone for the BLS series hand portable radio The CMP750 is attached with a revolving clip and allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. The CMP750 has a socket (3.5mm mono) to allow an optional earpiece (EHP9) for discreet reception of calls. Note: When the earpiece is attached the speaker microphone is no longer submersible, until the earpiece is removed and the waterproof cover is replaced and tightened.	
EA12/750 – 'D' shaped earpiece and tie clip microphone for the BLS series hand portable radio A 'D' shaped, soft rubber-feel earpiece, which fits over your ear. This is connected to a combined tie clip microphone and press to talk button via a curly cable. A rotating strain relief clip can attach to your collar to prevent the earpiece being dislodged if the cable were pulled. The EA12/750 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.	
EA15/750 – Acoustic tube earpiece and tie clip microphone for the BLS series hand portable radio A clear acoustic tube earpiece which fits in your ear using the small or large soft pink ear plugs supplied. This is connected to a combined tie clip microphone and press to talk button (PTT). The EA15/750 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is particularly suited to covert, security applications. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.	
EA19/750 – 'D' shaped earpiece with boom microphone for the BLS series hand portable radio A 'D' shaped, soft rubber-feel earpiece, which fits over your ear. The earpiece is combined with a lightweight short profile boom microphone. There is an in-line press to talk button (PTT) with clip. The EA19/750 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.	
EPT40/750 - Bone conductive earpiece microphone for the BLS series hand portable radio The combined microphone/earpiece allows discreet communication with no visible microphone. The earpiece connects via a quality in line connector to a large rugged waterproof press to talk (PTT) button that can clip on to a belt or other suitable position using the rugged revolving clip. The press to talk switch is easy to use, has a positive feel and can be used by a gloved hand or under clothing. As with all bone conductive accessories, we do not recommend using voice operated transmit (VOX).	
CXR5/750 - Bone conductive skull microphone with in-line PTT for the BLS series hand portable radio A high quality rugged bone conductive skull cap. The fully adjustable CXR5 fits on your head similar to a cap. The metal frame supports the bone conductor microphone, which fits on adjustable straps and sits on the top of your head. The adjustable twin earpieces clip into position each side. The robust cable exits the skullcap from the rear and attaches via a quality in-line connector to a large rugged waterproof press to talk switch that can clip on to a belt or other suitable position using the rugged revolving clip. The press to talk switch is easy to use, has a positive feel and can be used by a gloved hand or under clothing. As with all bone conductive accessories, we do not recommend using voice operated transmit (VOX).	

CXR16/750 – 'D' Shaped earpiece, throat microphone with large in-line PTT for the BLS series hand portable radio A high quality throat microphone with a comfortable soft-feel adjustable neck band. A rugged 'D' shaped earpiece accompanies the throat microphone and connects via a quality in-line connector to a large rugged waterproof press to talk switch that can clip on to a belt or other suitable position using the rugged revolving clip. The large sized press to talk (PTT) switch is easy to use, has a positive feel and can be used by a gloved hand or under clothing.	
CHP1/750 - Lightweight single earpiece headset with in-line PTT and VOX for the BLS series hand portable radio A 'breeze' style single earpiece wire-framed headset with boom microphone and wind cover. The headset has an in-line press to talk (PTT) button or the headset can be used with automatic voice activated transmit (when activated on the radio). The CHP1/750 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users. activated transmit (when activated on the radio). The CHP1/450 allows the radio user to carry the radio on their belt and have the facility to both make and receive calls without removing their radio. This keeps the radio safe and ensures that calls are not missed, especially in noisy environments. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.	
CHP750HS - Single earpiece ear defender (hard hat use only) with VOX for the BLS series hand portable radio A heavy duty single ear-cup earpiece with high quality noise-cancelling boom microphone and designed to connect to any safety hard hat via the supplied universal adapter. The headset provides both voice operated transmit (VOX) and a large easy-to-use press to talk button with spring-loaded clip, allowing the radio to be operated using a gloved hand or under clothing. We do stock a small range of common hard hat adapters which can be supplied in place of the universal adapter (please specify at time of ordering).	
CHP750HD - Double ear-cup ear defender (hard hat use only) with VOX for the BLS series hand portable radio A heavy duty ear defender headset with high quality noise-cancelling boom microphone designed to connect to any safety hard hat via the supplied universal adapter. The headset provides both voice operated transmits and a large easy-to-use press to talk button with spring-loaded clip, allowing the radio to be operated using a gloved hand or under clothing. We do stock a small range of common hardhat adapters, which can be supplied in place of the universal adapter (please specify at time of ordering).	
CHP750D - Double ear-cup ear defender with comfort headband and VOX for the BLS series hand portable radio A heavy duty ear defender headset with high quality noise-cancelling boom microphone and comfort headband. The headset provides both voice-activated transmit and a large easy-to-use press to talk (PTT) button with spring-loaded clip, allowing the radio to be operated using a gloved hand or under clothing.	
EHP750 – D' shaped covert style earpiece for the BLS series hand portable radio A 'D' shaped soft rubber-feel earpiece, which fits over your ear. The earpiece is designed to connect into the BLS series radio, via the locking accessory connector. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.	
EHP9 - 'D' shaped covert style earpiece for the BLS series hand portable radio A 'D' shaped soft rubber-feel earpiece, which fits over your ear. The earpiece is designed to connect into the CMP640 or CMP1/640 lapel speaker microphones. This accessory is designed for light to medium duty applications, so to ensure maximum life span it should be personally allocated to users.	
Carry Aids	
CFC750 – Soft leather case with carry strap for the BLS series hand portable radio A soft lightweight carry case with belt-clip available in a choice of 3 colours. The case comes with a wrist lanyard offering the choice of carrying methods and gives the radio both cosmetic and some impact protection	

CLC750 – Heavy duty transparent case and strap for the BLS series hand portable radio A clear heavy duty carry case with belt loop and strap. This will give the radio cosmetic and impact protection if dropped or knocked.	
CLC950 – Heavy duty leather case and strap with belt loop for the BLS series hand portable radio A heavy duty leather carry case with belt loop and strap. This will give the radio cosmetic and maximum impact protection if dropped or knocked.	
Miscellaneous	
CXW750 - Antenna adaptor for external aerial connection	
CAT20 - VHF high-band helical antenna for the BLS series hand portable This antenna provides optimum performance for the VHF hand portable transceiver.	-
CAT20VS - VHF high-band stubby antenna for the BLS series hand portable. This antenna offers a compact size whilst still delivering good performance. Note: if the range of your communication system is an important factor, we suggest that you use the full-length CAT20 antenna for the BLS Series.	-